

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 2-13 1939 42

✓ MR. SALYER: _____

SECTION OF HABITAT IMPROVEMENT:

① ✓ ~~MR. TRAVIN~~ Nhw~~Mr. Kubichek~~ _____✓ MR. EIMER: ACC 3/20Mr. Smith PRD 2/27/42

MISS GARRISON: _____

~~Mr. Griffith~~ PRD 2/27/42✓ ~~Mr. Dubont~~ PRD 3/14/42~~Miss Cook~~ wc 4-9-42

✓ SECTION OF OPERATIONS:

SECTION OF ERA:

~~Mr. Bull~~ WT 3/22Mr. Regan WRC 4/11/42② ~~Mrs. Watkins~~ _____~~Dr. Bourn~~ WSD 4/11/42

Mrs. Kricun _____

Mr. Sommers _____

~~Mr. Hunter~~ WRC 5/20

Miss Riley _____

✓ SECTION OF LAND MANAGEMENT:

STENOGRAPHERS:

~~Mr. Farintosh~~ 4-3~~Mr. Adenbach~~ cva✓ ~~Miss L. L. L.~~ _____

DIVISION FILES:

✓ SECTION OF STRUCTURES:

~~Mr. J. J. J.~~ WRC 5/8

REMARKS:

North Dak. Casement # 3
Quarterly Report
Nov - January 42

Return to:

Div. Files

NORTH DAKOTA EASEMENT REFUGES, DISTRICT #3
QUARTERLY NARRATIVE REPORT
NOVEMBER, DECEMBER, 1941, AND JANUARY, 1942.

United States Department of the Interior
Fish and Wildlife Service
Upham, North Dakota

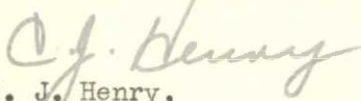
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TRANSMITTED BY REGIONAL OFFICE
2/10/42

EASEMENT REFUGES

There is nothing to report on any of the easement refuges during this last quarter. All refuges except Raab Lake were visited during the period, but solely for the purpose of bringing in the large wooden boundary markers for repainting and a change in lettering. The buildings at Willow Lake were inspected during the visit to that area.

Respectfully submitted,

February 5, 1942


C. J. Henry,
Refuge Manager



ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 11-24-1941☒ MR. SALYER 9/2☒ ① ~~MRS. WOODIN~~ ndw 4/12☒ ~~MR. ELMER~~ ACB 7/9/42☐ MRS. GARVIN☒ ~~MR. DUMONT~~ PAD 1-26

SECTION OF HABITAT IMPROVEMENT:

~~Mr. H. H. H. H.~~~~Mr. Smith~~ PRH 2/23/42~~Mr. Griffith~~ PEG 12/2/41~~Miss Cook~~ mc 12-5-41☒ SECTION OF OPERATIONS:~~Mr. Krummel~~ WK 1/14~~Mr. Gustafson~~ AK 2/3② Miss Baum MB

Mrs. Kricun

☒ SECTION OF ERA:~~Mr. Regan~~ HR 2/23/42~~Dr. Bourn~~ WSP 2/23/42

Mrs. Fishman

☒ SECTION OF LAND MANAGEMENT:~~Mr. Farnshaw~~ FE~~Mr. Ackerknecht~~ FE☒ STENOGRAPHERS:~~Miss Whorley~~ VW 1-10-42☒ SECTION OF STRUCTURES:~~Mr. Taylor~~ TS 4-8-42

REMARKS:

North Dakota Enclave # 3
August - October 1941

Return to:

Div. Files
Wildlife Refuges

gcl

TRANSMITTED BY REGIONAL OFFICE

11/21/41

NORTH DAKOTA EASEMENT REFUGES, DISTRICT #3

QUARTERLY NARRATIVE REPORT

AUGUST, SEPTEMBER, AND OCTOBER, 1941

United States Department of the Interior

Fish and Wildlife Service

Upham, North Dakota

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Cottonwood Lake Refuge	1
Wintering Lake Refuge	3
Camp Lake Refuge	4
Lake Nettie Refuge	4
Sheyenne Lake Refuge	4
Lord's Lake Refuge	5
Willow Lake Refuge	5
Raab Lake Refuge	7
School-Section Lake Refuge	8
Rock Lake Refuge	8
Brumba Lake Refuge	9
Snyder Lake Refuge	9
Photographs	10

INTRODUCTION

In general the condition of the easement refuges is excellent. All refuges started the spring with some water and many of them showed improvement during the summer. All easement refuges were visited at least once during the period. Our patrol of these refuges has been very meager, but from the attitude of the ducks using the refuges, it is fairly certain that the boundaries are very well respected. In most cases we have "contact" men living around the refuge, who we try to stop and visit with on each patrol trip. These are generally farmers who border the refuge and who spend a great deal of their time outdoors where they would be sure to observe any violations on the refuge. Their reports have been consistently favorable.

COTTONWOOD LAKE REFUGE

The water conditions on this area were still very good as compared to last year, when the area was entirely dry. The maximum depth is probably around 18 inches, which will give us an excellent start for 1942.

Wildlife. The duck population at the beginning of the period was somewhere between 750 and 1,000 birds. There was also at least 200 coots and quite a number of Great Blue Herons, Bitterns, Black Terns, Black-crowned Night Herons, and some gulls. The ducks were largely mallards, shovellers, Blue-winged Teal, Gadwalls, and a few Redheads.

On August 9 we visited the refuge, at which time we shot off four duck "bombs" and two boxes of shot-gun shells in an attempt to drive as many of the birds from the area as possible, to minimize losses from botulism. Immediately after we had bombed the area a bad storm came up which prevented us from making any sort of check on the losses. The area was visited again on October 14, at which time we made quite a thorough search of the lake shores and picked up as many sick and dead birds as possible. At this time there were not over 200 live ducks left on the lake, which indicated that our bombing efforts were of some value.

We estimated that from 200 to 250 birds had been affected by botulism, of which about 200 were ducks. It is estimated that 75% of the ducks affected had died. Only 6 sickducks and 3 coots were picked up. As these were all in fairly good shape we placed them in another portion of the lake, where they would most likely recover. A summary of the birds picked up is as follows:

<u>Birds Found Affected</u>	<u>Alive</u>	<u>Dead</u>
Small Shore Bird		1
✓ Black-crowned Night Heron		1
Bittern		3
✓ Coot	3	5
✓ Pied-billed Grebe		2
Total	3	12
<u>Ducks</u>		
✓ Shoveller	1	3
✓ Mallard	4	11
✓ Gadwall		2
✓ Green-winged Teal		1
✓ Blue-winged Teal		2
✓ Redhead		4
Unknown (badly decomposed)		21
Duck Total	5	44
TOTAL	8	56

The vegetation of the lake consisted almost entirely of Bulrush, principally of the two following varieties: tremendous stands of Prairie Bulrush (*Scirpus paludosis*), and heavy stands of Three-square (*Scirpus americanus*). Whether or not it was just a coincidence, I am unable to say, but for some reason most of the birds affected by botulism were found in the Prairie Bulrush, while there seemed to be much less evidence of it in pure stands of Three-square.

During October there were about 500 ducks on the refuge, which were principally mallards.

Structures were in good shape and boundary markers along roadways were replaced during October.

WINTERING LAKE REFUGE

Water conditions were still poor despite the abnormally high precipitation. There was sufficient water in the lake to carry through the whole year, but the lake should have been full all summer. It must be that the area is on a sand strata or something of that sort that makes it impossible to hold water in any appreciable amount.

Wildlife. The waterfowl population of the refuge was of no consequence, and it was never visited at any time when it had more than 20 ducks on it.

Food and Cover was covered in the last report.

New boundary markers were used to replace the old ones along the roadways, and the dam was found to be in good shape.

CAMP LAKE REFUGE

Water Conditions. The lakes were in good condition and lacked only a few inches of being full.

Wildlife. There were very few ducks during the summer because of the activity of people around the lake. During October 500 ducks, consisting almost entirely of mallards, were observed on the refuge.

Food and cover was discussed in detail in the last report.

The dam is in good condition, and boundary markers were replaced in October.

LAKE NETTIE REFUGE

Water Conditions. The lake is low, but in much better condition for this time of year than it has been for a very long time.

Wildlife. The lake was visited by a patrolman during October, at which time there were approximately 250 ducks, but the ducks were well out on the flats where they could not be identified.

Food and cover was discussed in detail in the last report.

Boundary markers were replaced in October.

SHEYENNE LAKE REFUGE

Water Conditions. The lake is still very high, as will be noted by the photographs in this report. A trace of Bulrush fringe far out on the lake indicates what used to be the shore line, that is, when the lake had any water in it.

Wildlife. This lake has had a fine population of ducks during the entire year. During October there were about 5,000 birds, which were principally mallards, although there were also large numbers of shovellers, and some teal and Redheads.

Food and cover was discussed in the last report.

Boundary markers were replaced in October.

LORD'S LAKE REFUGE

Water Conditions. The lake held up very well all summer and is evidently on its way back. The actual water area is at least 200 acres, and there have been lots of birds on it all summer.

Wildlife. In early August there were about 1,000 ducks on the refuge, plus about 300 coots. In October this had increased to about 10,000 ducks, most of which were mallards, although there was a fair sprinkling of both teals, shoveller, and gadwall. A good proportion of the mallards were undoubtedly doing much of their feeding in grain fields bordering the refuge. It was quite evident, however, that many of these birds were feeding heavily upon the abundant crop of Prairie Bulrush (*Scirpus paludosis*) seeds.

Food and cover was discussed in the last report.

Boundary markers were replaced during October.

WILLOW LAKE REFUGE

Water Conditions. The lake is still quite low but seems to have gained a little during the last quarter. Conditions are now

ideal for this area to make a splendid "comeback" next spring. The water was quite clear and there were a quite a few minnows in the lake.

Wildlife. There were large numbers of waterfowl on the area during August, totaling about 9,000 ducks and 3,000 coots, but for some reason they were not nearly as abundant during October. During October there were between 1,000 and 2,000 ducks, of which a good share were mallards, but there were also plenty of shovellers, lesser scaups, gadwall, Blue-winged teal, baldpates and Redheads.

Food and Cover. There is a large cattail fringe around the present lake border, which includes also a sprinkling of Soft-stemmed Bulrush (*Scirpus validus*), Hard-stemmed Bulrush (*Scirpus acutis*), and also considerable Slough Grass (*Beckmannia syzigachne*). Considerable Water Millet (*Echinochloa crus-galli*) was planted on previous occasions, and the growth is good in the small fenced-in area right in front of the cabin. Outside of this area, however, the plant has been grazed on by cattle. It is felt that the large cattail fringe (*Typha latifolia*) that now dominates the entire lake border is only a temporary condition resulting from the tremendously low water levels of the past few years. As soon as the lake has returned to normal levels, the soil conditions will be mostly unfavorable for this plant, and it should almost entirely disappear from the lake. In the Lake itself there is a large quantity of pondweeds, which were apparently almost entirely a

small leafy pondweed of the pusillus type.

This summer we found that the lock to the door of the cabin was broken, and it was necessary for us to force entrance through a basement window in order to remove this lock and have it repaired. At the same time as much as possible of the grass, weeds and leaves around the cabin were mowed, cleaned up, and burned.

The boundary markers were replaced in October.

RAAB LAKE REFUGE

Our only visit to the Raab Lake Refuge was made in August, as road conditions at other times made it absolutely impossible to get in without walking. As the area is small and unimportant, this was considered unnecessary.

Water conditions were considerably improved over any previous visit, with water extending entirely inside of the emergent fringe of cattails and rushes. The water was perfectly clear and there appeared to be a healthy growth of pondweeds far out on the lake but which we could not reach to identify. Between the water and the timber was a good growth of grasses and weeds.

Wildlife. There was a total of 300 ducks on the refuge, which is the most we have ever seen on the refuge at any one time. These were principally mallards, with a fairly good sprinkling of Blue-winged teal and gadwall, and a few shovellers, baldpates, and pintails.

SCHOOL-SECTION LAKE REFUGE

Water Conditions. This lake has also held up well and appeared to be in quite healthy condition.

Food and Cover. Outside of the timber border was a good growth of grasses and weeds, and on the emergent fringe, of cattails and bulrush along the edge of the water. As we did not have a boat with us it was not possible to get out away from shore to find out what was attracting a goodly number of waterfowl that were using the area.

Wildlife. In August there were almost 1,000 ducks on the lake, while in October there were about 4,000. This included many lesser scaups and some Redheads, mallards, gadwall, shovelers, and Blue-winged teal.

The dam is satisfactory and boundary markers were changed in October.

ROCK LAKE REFUGE

Water Conditions. Rock Lake has held up well all summer, and is a beautiful area

Food and Cover. Unfortunately it was not found possible for either Mr. Hammond or me to inspect this refuge, Snyder, or Brumba Lake Refuges to determine the vegetative types present and exactly what birds were using the area.

These three refuges were inspected by a patrolman and Junior Refuge Manager in October, at which time they inspected the dams and replaced boundary markers along the main roads. Rock Lake,

being a newly flooded area, was coming up heavily to grasses which, as is usual for the first year, extended out into quite deep water.

Wildlife. The lake contained heavy population of coots, possibly 2,000 or 3,000, but there were not very many ducks at the time of the inspection, the total number probably not exceeding much over 1,000.

The dams were found to be in good condition.

BRUMBA LAKE REFUGE

Water Conditions. Brumba Lake still had plenty of water, but there was only a fair population of coots and ducks, which totaled not more than a few hundred.

The dam was in good condition and boundary markers were replaced in October.

SNYDER LAKE REFUGE

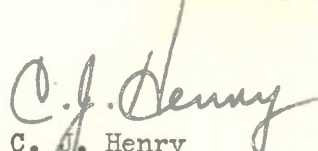
Water Conditions. The lake was still high.

Wildlife. As this is a deep lake, the waterfowl population consisted almost entirely of divers, principally lesser scaups and Redheads. The total duck population was about 500.

Food and Cover. There is a good grass border around the lake where the land is not farmed, but the sides are too steep to produce much in the way of marshy vegetation.

The dam was in good condition and boundary markers were replaced in October.

Respectfully submitted, 11/7/41

A handwritten signature in dark ink, appearing to read "C. J. Henry". The signature is fluid and cursive, with the first name "C. J." and the last name "Henry" clearly distinguishable.

C. J. Henry
Refuge Manager
Lower Souris Refuge

PHOTOGRAPHS



Front & rear views of cabin on Willow Lake Refuge
(Negative of front view reversed in printing)
R124-1 & 2, August, 1941





Willow Lake Easement Refuge
R124-5 & 6, August, 1941





Raab Lake Easement Refuge
R124-7 & 8, August, 1941





A flowing well on Cottonwood Lake Easement Refuge (1 year old)
 R124-9, August, 1941
 Taken by M. C. Hammond



Shenenne Lake Easement Refuge
 R124-10, August, 1941
 Taken by M. C. Hammond



Picking up sick and dead birds (from botulism) on
Cottonwood Lake Refuge; Springer Spaniel "Bones"
assisting. (R124-11 & 12, August, 1941)





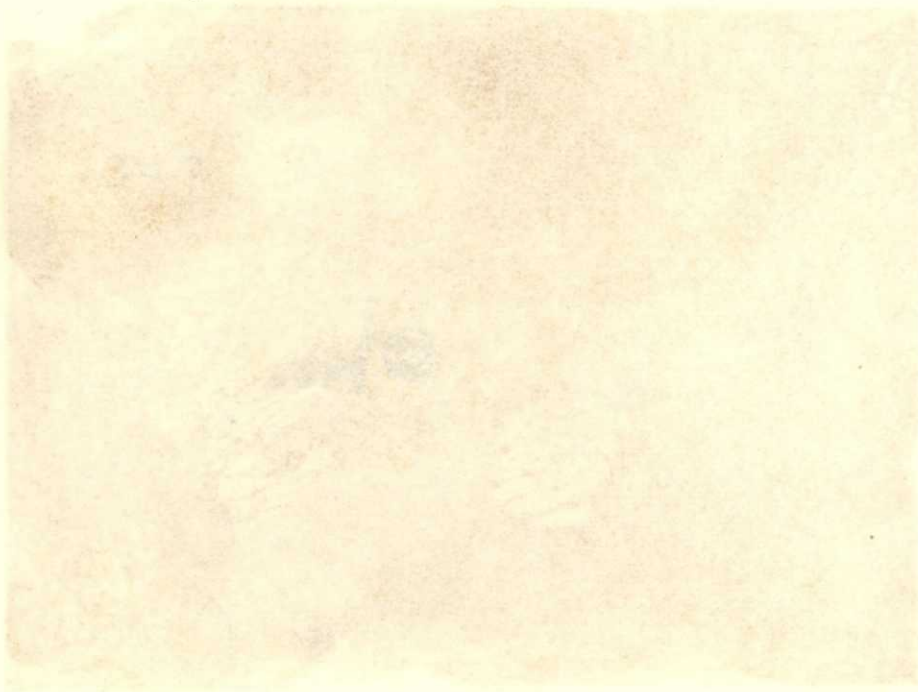
Shenoyenne Lake Easement Refuge
R124-13 & 14, August, 1941
Taken by M. C. Hammond





Lord's Lake Easement Refuge
R124-15, August, 1941





Lord's Lake Massanut Ridge
RIS-18, August, 1941



ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 8-15 1941

✓ MR. SALYER

① ✓ ~~MRS. WOODIN~~✓ ~~MR. [unclear]~~

MRS. GARVIN

✓ MR. DUMONT

SECTION OF HABITAT IMPROVEMENT:

~~Mr. Hatcher~~~~Mr. Smith~~ PJA~~Mr. Griffith~~ [unclear]~~Miss Cook~~ mc

SECTION OF OPERATIONS:

✓ ~~Mr. Krummel~~ WK 9/25✓ ~~Mr. Gustafson~~ 12/9② ✓ ~~Miss Baum~~ mi

Mrs. Kricun

SECTION OF ERA:

✓ ~~Mr. Regan~~ JGR 12/10/41✓ ~~Dr. Bourn~~ WSB 12/10/41

Mrs. Fishman

✓ SECTION OF LAND MANAGEMENT:

~~Mr. Earnshaw~~ [unclear]~~Mr. Ackelrecht~~ [unclear]

STENOGRAPHERS:

✓ ~~Miss Whorley~~ WN 10-17-41

✓ SECTION OF STRUCTURES:

~~Mr. Taylor~~ WV 3/18

REMARKS:

North Dakota Experiment
District #3 Quarterly
May-July '41

Return to: Cook

Easements, N. D.
District #3

August 25, 1941

Regional Director
500 National Building
Minneapolis, Minnesota

Dear Sir:

Reference is made to Mr. Gillett's letter of August 21, in which we were advised that we had included insufficient information in our quarterly narrative report for the North Dakota Easement Refuges.

I am very sorry about my over-sight in omitting the condition of the dams and boundary markers. This had been covered in previous reports and as there had been no change, I had not considered it necessary to repeat the statements concerning these structures.

All of the dams are in good condition. The boundary markers, in general, are only in fair condition. As pointed out previously, the boundary markers on the easement refuges suffer more mutilation than those on Lower Souris, where we are able to watch the area more closely. To date we have not been able to replace any of the boundary markers with the new type of marker received this summer. In view of the amount of work that must be done on patrol roads during September, it is doubtful that very much will be done before the opening of hunting season. During October, however, we should be able to take care of this posting at the same time that some of these areas are being patrolled.

The buildings and tower at Willow Lake are in good condition, except that the lock on the Willow Lake cabin was broken, and we finally had to resort to entrance through a basement window. The lock was removed and taken to Bottineau where it was repaired, and we are now able to use the door to the cabin once more.

Very truly yours,

C. J. Henry
Refuge Manager

CJH:jek



Essex, N. D.
District 3

August 26, 1941

Regional Director
500 National Building
Minneapolis, Minnesota

Dear Sir:

Reference is made to Mr. Gillett's letter of August 21, in which we were advised that we had included insufficient information in our quarterly narrative report for the North Dakota Resistant Refugees.

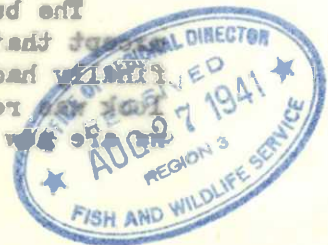
I am very sorry about my oversight in omitting the condition of the dams and boundary markers. This had been covered in previous reports and as there had been no change, I had not considered it necessary to repeat the statements concerning these structures.

All of the dams are in good condition. The boundary markers, in general, are only in fair condition. As pointed out previously, the boundary markers on the easement refuge suffer more mutilation than those on lower Bourke, where we are able to watch the area more closely. To date we have not been able to replace any of the boundary markers with the new type of marker received this summer. In view of the amount of work that must be done on patrol roads during September, it is doubtful that very much will be done before the opening of hunting season. During October, however, we should be able to take care of this posting at the same time that some of these areas are being patrolled.

The buildings and tower at Willow Lake are in good condition. It was reported that the look on the Willow Lake cabin was broken, and we had to resort to entrance through a basement window. The removed and taken to Bottineau where it was repaired, and we are able to use the door to the cabin once more.

Very truly yours,

G. J. Henry
Refuge Manager



CH:jek

IN REPLY REFER TO

Easements, N. D.
District #3

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
OFFICE OF REGIONAL DIRECTOR
500 NATIONAL BUILDING
MINNEAPOLIS, MINNESOTA

REGION 3

NORTH DAKOTA
SOUTH DAKOTA
NEBRASKA
MINNESOTA
IOWA
MISSOURI
WISCONSIN
MICHIGAN
ILLINOIS
INDIANA

August 28, 1941

The Director,
Fish and Wildlife Service,
Washington, D. C.

Dear Sir:

Reference is made to the quarterly narrative report for the North Dakota Easement Refuges in District #3, under the supervision of Mr. C. J. Henry, Refuge Manager.

There is enclosed a copy of Mr. Henry's letter, dated August 25, which includes additional information regarding these easement areas and should be attached to the narrative report.

Very truly yours,

F. C. Gillett
Refuge Inspector

Enclosure



24

R24

NORTH DAKOTA EASEMENT REFUGES, DISTRICT #3

QUARTERLY NARRATIVE REPORT

MAY, JUNE AND JULY, 1941

United States Department of the Interior

Fish and Wildlife Service

Upham, North Dakota

CONTENTS

	<u>Page</u>
Introduction	1
✓ Cottonwood Lake Refuge	1
Water Conditions	1
Wildlife	2
Food and Cover	2
Botulism	2
Plantings	3
✓ Wintering Lake Refuge	3
Water Conditions	3
Wildlife	3
Food and Cover	5
✓ Camp Lake Refuge	5
Water Conditions	5
Wildlife	5
Food and Cover - Strawberry Lake	6
Food and Cover - Camp Lake	6
✓ Lake Nettie Refuge	7
Water Conditions	7
Wildlife	7
Food and Cover	7
✓ Sheyenne Lake Refuge	7
Water Conditions	7
Wildlife	8
Food and Cover	8
✓ Lord's Lake Refuge	
Water Conditions	8
Wildlife	9
Food and Cover	9
✓ Willow Lake Refuge	9
Water Conditions	9
Wildlife	9
Food and Cover	10

CONTENTS cont'd.

	<u>Page</u>
/ School-section Lake Refuge	10
Water Conditions	10
Wildlife	10
Food and Cover	10
/ Raab Lake Refuge	10
/ Rock Lake Refuge, Brumba Lake Refuge, and Snyder Lake Refuge	10

INTRODUCTION

Early this year we hoped that 1941 would be different, and that we would be able to spend a little more time with the easement refuges. This has not been the case, however, as there has been more work than we could handle on Lower Souris alone. In this connection it should be remembered that the added responsibility of the easement refuges of District #3 was given us without any addition to the personnel. With the appointment of a Junior Refuge Manager trainee, it is hoped that we will be able to cover these areas more thoroughly during the next quarter.

All of the easement refuges except Raab Lake have been visited at least twice this summer. No posting with the new Fish and Wildlife Service markers has yet been done (except on Lower Souris).

This is the first summer in which all twelve easement refuges have had water in them, and according to present indications they will all hold up at least until the ducks are all able to fly. Wintering might be the only exception.

COTTONWOOD LAKE

Water Conditions are better than at this time last year, although the lake is quite low. The maximum depth is probably around eighteen inches. The water should last well into September at least. The total water area is around a hundred acres.

Wildlife. The duck population was somewhere between 750 and 1,000 at the last of July. There were also about 200 to 300 Coots, and quite a concentration of Great Blue Herons, Black Terns, and Bitterns. The ducks were principally "dabblers", and the diving ducks were exceedingly scarce. The most common species were Blue-winged Teal, Pintails, Gadwall, Shovellers, Baldpates, and Mallards.

Food and Cover conditions are considerably improved. The lake contains an excellent stand of Sago Pondweed which is seeding very well. There is an excellent stand of emergents around the entire lake shore, with many fine "Islands" of rushes. The emergents include principally Three-square (*Scirpus americanus*), Prairie Bulrush (*Scirpus paludosis*), and Hard-stemmed Bulrush (*Scirpus acutis*). All bulrushes seeding abundantly.

The nesting cover is fair to good, consisting of grass, Buckbrush (*Symphoricarpos occidentalis*), weeds, and mixed cover. There is quite a sprinkling of Cottonwood trees around the lake, while the south shore is quite brushy. The flowing springs that were developed last year are still doing satisfactorily. Mourning Doves and Goldfinches, especially, were using these springs in good numbers.

Botulism has developed on this area. This confirms reports of its occurrence here in the past. The outbreak does not appear to be serious, and probably less than a hundred birds have been affected. The infected area appears restricted to the southwest shore of the lake.

The duck sickness has occurred in areas of dense bulrush where there were no aquatics. There was some dead bulrush decaying in the water.

There is a small pond in the southeast corner of the lake that is now completely isolated from the lake. A local farmer stated that there were a number of dead ducks in this pond in 1938. This year there were none. The pond is now filled with a dense mass of Sago Pondweed.

Plantings. In May 1940 we planted 100 pounds of Wild Millet seed (*Echinochloa crus-galli*) and 75 pounds of Prairie Bulrush (*Scirpus paludosis*). There is an abundance of Prairie Bulrush on the area, although it is believed that most of this has occurred by natural reproduction. There was no evidence of success from the Millet plantings.

WINTERING LAKE REFUGE

Water Conditions are poor despite the abnormally high precipitation this year. The average depth of the lake is not over an inch or two. Fortunately, the waterfowl population is negligible so there will be no appreciable loss if the area goes dry before the birds are on the wing. This refuge is of no value and might better be abandoned.

Wildlife. By actual count, the duck population of this refuge was twelve. There may possibly have been a few more in the weeds that escaped the observer's attention, but there could not have been more than a few as the area was covered quite

thoroughly. Ducks observed: Mallards, 4; Redheads, 4; Ruddy Ducks, 3; Pintail, 1. A few Black Terns and one Bittern were also noted.

A farmer living at the edge of the "lake" was questioned as to whether or not he had seen any ducks. He said, "Well, I saw one fly over about three days ago."

Food and Cover. Most of the lake is covered with a dense stand of Bog Rush (*Eleocharis palustris*), with patches of River Bulrush (*Scirpus fluviatilis*). The stand is so dense as to practically prevent ducks from getting through it. There is also some Cord Grass (*Spartina*), Sedge (*Carex*), Burreed (*Sparganium eurocarpum*), Smartweed (*Polygonum mühlenbergia*), Duck Potato (*Sagittaria*), and White-top Grass (*Fluminea festucacea*).

CAMP LAKE REFUGE

Water Conditions. As stated in previous reports, these lakes are spring-fed and drop but little during the summer. The maximum depth of Strawberry Lake is about eighteen feet. The banks are steep and the area is of little value as a nesting refuge. The lakes are used very extensively by the public for fishing, swimming, boating, picnicking, and so on.

Wildlife. Approximately 25 ducks and one Holboell's Grebe were observed on Strawberry Lake. The ducks were Blue-winged Teal and Baldpates. In Camp Lake there were about 175 ducks consisting of Gadwall (50%), Blue-winged Teal (20%), Mallards (10%), Baldpates, and Shovellers. Also a number of Coots.

Food and Cover - Strawberry Lake. Except for the very south end of the lake there is little marginal vegetation except for cord grass (*Spartina*) and willows. The shore line is very steep. There are occasional clumps of Hard-stemmed Bulrush (*Scirpus acutis*) and Cattails (*Typha latifolia*), some of these originating from the floating islands at the south end of the lake. For about one-fourth mile at the south end of the lake there is a dense stand of Hard-stemmed Bulrush and Cattails about equal in abundance. Most of this is confined to the narrow channel above the dam. During high water levels this mass of vegetation with its rootstocks and accompanying peaty soil will float, and has frequently broken off in large floating islands which have caused some damage to amusement areas, and considerable accompanying criticism. Coontail and Sago Pondweed were seen at the south end of the lake. Nesting cover is fair, but is overgrazed.

Food and Cover - Camp Lake. A scattered fringe of Hard-stemmed Bulrush and Cattails in the south end, otherwise there is a cord grass edge except in the north end slough. A somewhat shallow bay in the north end of the lake supports cattails (dominant), and Hard-stemmed Bulrush in the center of the area with a ten to fifteen foot fringe of Three-square (*Scirpus americanus*) in places. There was no evidence of the wild rice planted here in 1939. Nesting cover is good (upland grass) and does not appear to have been grazed up to the present time.

LAKE NETTIE REFUGE

Water Conditions. The lake is low and extensive mud-flats are exposed. The main body of the lake has a maximum depth of not much over six inches, although there are apparently some deeper holes in the bulrush stands along the east shore. Some of these holes are evidently spring-fed.

Wildlife. There were about 250 ducks on the refuge at the end of the quarter. There were also approximately 35,000 Franklin's Gulls, and countless thousands of shore-bird (possibly 400,000 to 500,000).

Food and Cover. North of the island there is a salt grass (*Distichlis*) border of from 50 to 200 feet. Next a stand of Three-square (*Scirpus americanus*) that is 150 feet or more in places, and a nearly solid stand of Prairie Bulrush (*Scirpus paludosis*) with a trace of Soft-stemmed Bulrush (*Scirpus validus*). The inner fringe consists of vegetative islands of Prairie Bulrush. The water is down below the vegetative line in most places. South of the island there is a solid stand of Three-square with just a trace of Prairie Bulrush that is about one-fourth mile wide at the base and in the shape of a triangle, with about one-fourth mile to the apex. The remainder of the south and west side is not so wide, apparently about 25 to 50 feet.

SHEYENNE LAKE REFUGE

Water Conditions. The lake is still very high and lacks only about three inches of flowing out through road culvert overflow.

Wildlife. Mr. Hammond reported a very excellent population of waterfowl on this small refuge, approximately 2,000 ducks and 3,000 coots. Ducks observed included Blue-winged Teal, Pintail, Gadwall, Shoveller, Baldpate, Ruddy Duck, Canvasback, Mallard, and Redhead. Broods of all nine species were noted. The most common varieties were Pintails, Blue-winged Teal, and Shovellers. Other birds observed included Black-crowned Night Herons, Black Terns, and a Prairie Chicken with four young.

Food and Cover. The water is far above the old Hard-stemmed Bulrush shore line, although a sprinkling still appears there in deep water. It occurs sparingly in the new shore line, with some fairly good stands in the northwest end of the lake. Other vegetation includes Cane (*Phragmites communis*), Three-square (*Scirpus americanus*), River Bulrush (*Scirpus fluviatilis*), Smartweed (*Polygonum muhlenbergii*), Cord Grass (*Spartina*), Bog Rush (*Eleocharis palustris*), Sedge (*Carex*), Slough Grass (*Beckmannia syzigachne*), and Cattails (*Typha latifolia*). Pondweeds are showing up well in the old lake bed, but are scarce otherwise. The upland nesting cover is good where the land is not farmed.

LORD'S LAKE REFUGE

Water Conditions. This lake still had a good quantity of water in early August, and may possibly last until freeze-up. The lake is shallow but may have 12 to 18 inches yet in the deepest parts. The actual water area is around 200 acres. Previous to this spring the lake had been dry for many years. It was

completely dry at the time of my first visit to it in the summer of 1935.

Wildlife. There were about 1,000 ducks on the refuge, plus perhaps 300 Coots. Pintails were the most common, but there were also good numbers of Gadwall, Widgeon, and Blue-winged Teal. No diving ducks were observed. There was a sprinkling of shore-birds and grebes.

Food and Cover. Practically the entire lake bed is covered with a fairly heavy stand of Prairie Bulrush (*Scirpus paludosis*), although there are some splendid stands of Hard-stemmed Bulrush (*Scirpus acutis*). There is a wide variety of grasses, weeds, and sedges on the shore. No appreciable amount of aquatics are yet in evidence. There is plenty of good cover on the uplands, which consisted principally of native grasses. There are also a few trees, and a great deal of brush, principally buckbrush (*Symphoricarpos occidentalis*), Silverberry (*Eleagnus argentea*), Chokecherry (*Prunus virginia*), and Willows (*Salix*).

WILLOW LAKE REFUGE

Water Conditions. The lake is still quite low but it has held up well this summer, and will last until freeze-up. The total water area appears to be about 400 acres.

Wildlife. Time did not allow a census of the ducks, but there was a splendid concentration at the end of the period. A rough estimate was 6,000 ducks, with a high percentage of Pintails,

Gadwall, Blue-winged Teal, Shovellers, and Baldpates. There were also a number of coots. Other wildlife includes Deer, Ruffed Grouse, Sharp-tailed Grouse, and Pheasants.

Food and Cover conditions appear to be very good. An attempt will be made to cover this area thoroughly during the next quarter.

SCHOOL-SECTION LAKE REFUGE

Water Conditions. The lake is in fairly good condition and will not dry up this year.

Wildlife. There were about 800 ducks and a sprinkling of coots at the end of the period. The ducks were principally Pintail, Gadwall, Blue-winged Teal, Shovellers, Baldpate, and Mallard.

Food and Cover. Appear to be improved over last year. A thorough report will appear in our next quarterly narrative.

RAAB LAKE REFUGE

This refuge was not visited, because of either impassable roads or insufficient time. The lake is scarcely more than a pond, and is of practically no value.

ROCK LAKE REFUGE, BRUMBA LAKE REFUGE, and SNYDER LAKE REFUGE

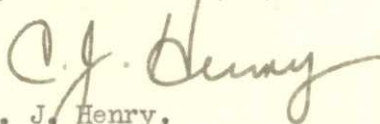
We did not have time to inspect these refuges carefully during the quarter. A Patrolman made one visit to check up on the structures and water levels. Rock Lake went down about

eighteen inches below the maximum spring level, while the others dropped even less.

Snyder Lake had but few ducks, Brumba had a fair population, while there were large numbers on Rock Lake. Rock Lake is a large area and will require considerable time for a thorough survey. We plan to check these refuges carefully within the next two months, and make a more detailed report at the end of the quarter.

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Respectfully submitted, 8/13/41



C. J. Henry,
Refuge Manager
Lower Souris Refuge



ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 5-12-1941☒ MR. SALYER① ☒ MRS. WOODEY Nhw☒ MR. ELMER OR

MRS. GARVIN

☒ MR. DUMONT PAJ

SECTION OF HABITAT IMPROVEMENT:

~~Mr. Kabischok~~~~Mr. Smith~~ PNH~~Mr. Griffith~~ REG~~Miss Cook~~ rwc

SECTION OF OPERATIONS:

Mr. Ball

☒ ~~Mr. Keweenaw~~ WK② ☒ ~~Mrs. Watkins~~ MW

Mrs. Kricun

SECTION OF ERA:

☒ ~~Mr. Regan~~ JKR☒ ~~Dr. Bourn~~ WSD

Mrs. Fishman

☒ SECTION OF LAND MANAGEMENT:~~Mr. Barnshaw~~ B~~Mr. Barnshaw~~ wa

STENOGRAPHERS:

Miss Price

☒ ~~Miss Whorley~~☒ SECTION OF STRUCTURES:~~Mr. Taylor~~ WV~~Mr. Gustafson~~ KLL

REMARKS:

No. Dak. Easements # 3Quarterly ReportFebruary - April 1941

Return to:

Cook
Div. Files

R - Z
H.I.

August 1, 1941

Mr. Burnie Maurek
Regional Director
500 National Building
Minneapolis, Minnesota

Dear Mr. Maurek:

In checking over the quarterly reports for the North Dakota easement districts Nos. 3 and 6, we note that very little specific wildlife data is included. This is particularly true in Mr. Henry's report on District No. 3, containing such statements as, "----- a few hundred ducks on the lake -----". Since wildlife and planting data are maintained on the easement refuges as in other refuges within the system, we are requesting that species and numbers be reported as outlined in Division Memorandum No. 91. It will also be desirable to include statements as to the amounts and nature of food and cover present. It will not be necessary to treat this information in such detail as requested for major refuges. It is, however, necessary that we are furnished with specific population numbers.

Sincerely yours,

Robert H. Smith
Acting In Charge
Section of Habitat Improvement
Division of Wildlife Refuges

RHS/MAB

NORTH DAKOTA EASEMENT REFUGES, DISTRICT #3

QUARTERLY NARRATIVE REPORT

FEBRUARY, MARCH, AND APRIL, 194^b

United States Department of the Interior

Fish and Wildlife Service

Upham, North Dakota

TRANSMITTED BY REGIONAL OFFICE

5-9-41

INTRODUCTION

The outstanding feature of the period has been the disparity in the quantity of water received by the easement refuges. Sheyenne Lake received far more than enough water to fill it, while the other four refuges in that portion of our district received practically no run-off. Rock Lake, Brumba Lake, and Snyder Lake in the Mauvais Coulee watershed received a tremendous quantity of water, while the lakes in the Turtle Mountains nearby were improved but slightly over last fall. It has been possible to reach all but one easement refuge (Raab Lake) at least once this spring. Impassable roads and the pressure of work on the Lower Souris made it impossible to watch these refuges as closely as we feel they should. I myself have had time this spring to visit but six out of the twelve easement refuges in this district.

SNYDER LAKE REFUGE

This refuge received more than enough water to fill it and a trickle was still going over the spillway at the time of our last visit on April 23. The overflow created a nice little marsh below the dam. The dam has backed the water for a considerable distance up the valley, coming well up on highway No. 281. This is a situation that may cause some trouble as wave action will soon remove the road unless action is taken to raise and protect it. My suggestion is to "sit tight" and see if the highway department will not take care of it; I feel that there is a very good chance they will as the people in that area are so glad to see the water.

There were some ducks on the lake, but not as many as would be

expected considering the amount of water. Most of the lake is deep, with steep slopes, and is more adaptable to recreational uses than as a breeding ground for waterfowl.

The dam is well built and is in good condition. It showed no effects from the considerable amount of water that flowed over the spillway.

BRUMBA LAKE REFUGE

Brumba Lake is in the same watershed, and immediately above Snyder Lake. Quite a considerable quantity of water flowed over the spillway of this refuge also, and there was still a trickle going over on April 23. The dam is in good condition.

Brumba Lake is more of the nature of a typical Prairie Slough, and is much better as a nesting area than Snyder. There were quite a few ducks on the lake.

ROCK LAKE REFUGE

The high-light of my trip on April 23 was the visit to Rock Lake. This lake had been dry for a number of years, but the run-off this spring was sufficient to put it in splendid condition (see photos). There were large numbers of ducks on the area; we did not have time to cover the entire refuge, so did not make an estimate. This is really a beautiful area and far surpasses anything in this district.

The dam is well built and is in good condition. If time permits, I will make a more careful study of the refuge this summer. I have no reason to doubt that this area will prove to be an outstanding refuge in spite of the fact that we have no control over grazing,

boating, and certain other activities.

SCHOOL-SECTION LAKE REFUGE

At the time of my visit on April 23rd, most of the lake was still covered with ice. There were, therefore, but few ducks on the area. The lake is still low, there being not more than a three or four inch raise since last fall. In view of the fact that there have been such slight changes in the levels of this lake during the past two or three years, I am of the opinion that the levels are governed to a certain degree by the water table, or by springs.

WILLOW LAKE REFUGE

The water level of Willow Lake has raised possibly eight or ten inches since last fall. The lake needs at least two feet more to be at the best level. There is enough water to last all summer unless drought conditions prevail. There were possibly a few hundred ducks on the lake, but there was still lots of ice on April 23.

The buildings, tower, and other structures were in good condition. Our N.Y.A. observer has been raking the leaves away from the buildings to eliminate the fire hazard.

In our last report we mentioned the apprehension of Victor Lagerquist for shooting deer on the Willow Lake Refuge. In making further investigation on this case, additional violations came to light. These were all tried before justice Ray Wilson of Dunseith with the following results: Victor Lagerquist; shooting deer out of season (also on Willow Lake Refuge) November 10, 1940. Penalty \$50.00 fine, \$4.00 costs, 30 days in jail (\$25.00 of fine and jail sentence suspended on good behavior).

Arthur Landsverk; aiding and abetting in loading and concealing deer (above case) November 10, 1940. Penalty \$5.00 fine suspended, 20 days jail suspended, \$4.00 costs.

Orville Thomas; shooting deer out of season (also on Willow Lake Refuge) fall of 1939. Penalty \$25.00 fine, \$4.00 costs, 20 days jail. Jail sentence suspended on good behavior.

Phil Johnson; hunting with Orville Thomas, fall of 1939. Penalty \$25.00 fine, \$4.00 costs.

The law enforcement work on these cases was done by Harry Jensen, Refuge Patrolman, and Martin Myhre, state game warden, working in co-operation.

RABB LAKE REFUGE

The road to Rabb Lake is still impassable so we made no effort to reach it. In view of conditions at Willow Lake, which is only a few miles away, it is believed that there is but little improvement over last year. The lake is too small to be of much value as a refuge.

LORD'S LAKE REFUGE

The first time I ever saw Lord's Lake was in the summer of 1935 at which time it was dry, and it has been dry ever since up to this spring. This years run-off put quite a bit of water in both lakes but they still lack a great deal of being full. I doubt very much that this refuge will have water all summer, and it may go dry before the end of the nesting season. There were quite a few ducks on the refuge.

WINTERING REFUGE

The Wintering Refuge received some water, but not enough to last

all summer. In 1939 when the refuge was filled to overflowing it failed to last through the nesting season. There were a few scattered pairs of ducks.

CAMP LAKE REFUGE

Camp Lake and Strawberry Lake are spring-fed and therefore change but little from year to year. This is a resort area that is extremely popular for fishing, boating, swimming, picnicing, and the like. The water is mostly quite deep.

The refuge has some value as a stopping place for ducks in the fall flight, but there is so much activity during the summer that there can be but little chance for ducks to use the area then. The dam is in good condition.

LAKE NETTIE REFUGE

The run-off in this area was very poor, and the small amount of water received will not last very long unless augmented by exceptionally generous rain-fall.

COTTONWOOD LAKE REFUGE

Despite the fact that Cottonwood Lake had a very good quantity of water during the summer of 1940, it dried up completely in mid-September. The run-off this spring was poor and the lake will undoubtedly dry up in the very near future. The structures constructed last summer appear to be in good condition, but did not get the test that we had hoped for.

SHEYENNE LAKE REFUGE

This refuge had a tremendous run-off and received enough water to possibly fill it two or three times. Coal Mine Lake just below it has a good deal of water in it; this lake has been dry. On his last visit to this refuge on April 18, Patrolman Martinson found that everything in Sheyenne Lake was so inundated that it was still impossible to check the structures. Water was still flowing a full stream leaving the lake through the culverts in the road.

There were quite a few ducks on this area.

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Respectfully submitted, 5/5/41


C. J. Henry,

Refuge Manager

Lower Souris Refuge

P H O T O G R A P H S



A general view of Rock Lake
(R-118-1, April 23, 1941)



The Rock Lake Dam
(R-118-2, April 23, 1941)



A general view of the
Brumba Lake Refuge
(R-118-3, April 23, 1941)



The Brumba Lake Dam and Spillway
(R-118-4, April 23, 1941)



Snyder Lake from the Recreation Area
(R-118-5, April 23, 1941)



Spillway of Snyder Lake Dam
(R-118-6, April 23, 1941)



Willow Lake from the lookout tower
(R-118-7, April 23, 1941)

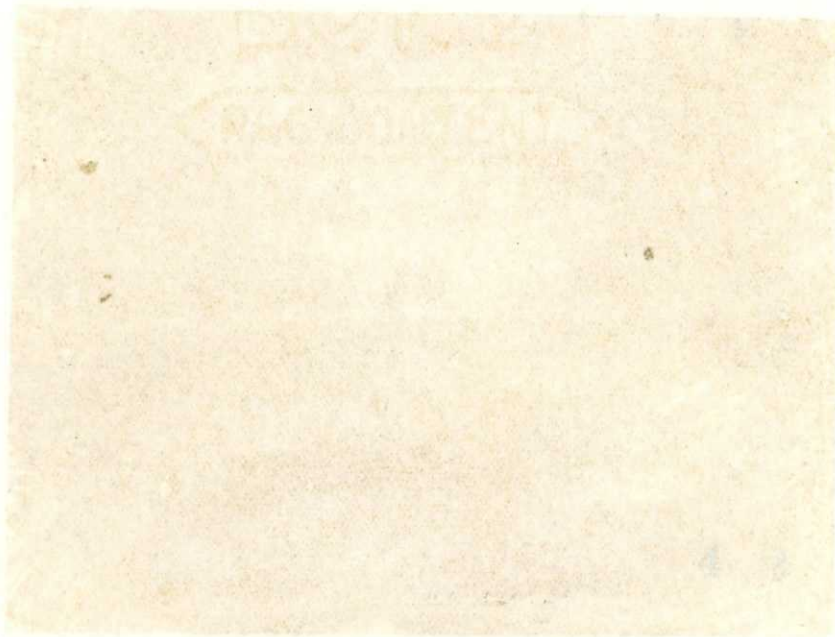


Willow Lake Cabin from Tower
(R-118-8, April 23, 1941)



A general view of School-section
Lake. Note ice still on lake and
snowdrifts in background
(R-118-9, April 23, 1941)





A general view of School-section
Lake. Note ice still on lake and
snowdrifts in background
(R-118-3, April 23, 1941)

